Ontario

Ministry of Health and Long-term care
Public Health Division

Ontario Influenza Bulletin
2006-2007 Season

SURVEILLANCE WEEK 35- 36 (August 27 – Sept 9), 2006

This issue of the Ontario Influenza Bulletin provides information on the surveillance period from August 27-September 9, 2006 (weeks 35 and 36), the first edition of the 2006-07 season. The analysis for this issue occurred on Thursday Sept 14, 2006, therefore all data is current to that date.

During weeks 35 and 36 of 2006, influenza activity in Ontario was similar compared to that of the previous two weeks. No sporadically occurring case of influenza was reported through iPHIS and no institutional outbreak of influenza was reported from health units. All the health regions reported 'no activity' levels.

Please note: Starting from the 2006-2007 influenza surveillance season (i.e. September 1, 2006), influenza activity reports will be collected every week throughout the year. Please make sure that influenza activity reports (Appendix C) reach the Public Health Division Call Centre [Fax: (416) 326-0694] each Tuesday by 4:00 P.M. EST. Your attention to this matter is greatly appreciated.

For a definition of influenza-like illness (ILI) activity levels and links to websites providing current influenza information from other sources, please refer to the attached Appendix. If you would like to provide feedback on the Bulletin, please contact Shafiq Chowdhury (shafiq.chowdhury@moh.gov.on.ca, 416-327-7807) or Anne-Luise Winter (anne-luise.winter@moh.gov.on.ca, 416-327-7301).

Table 1: Summary of laboratory-confirmed influenza cases and institutional influenza outbreaks by health region, August 27 – Sept. 9 (weeks 35 & 36), 2006.

Lab-confirmed Influenza cases*	HEALTH REGION							TOTAL
	North West	North East	Eastern	Central East	Toronto	South West	Central West	
Influenza A	0	0	0	0	0	0	0	0
Influenza B	0	0	0	0	0	0	0	0
Influenza A & B	0	0	0	0	0	0	0	0
Unspecified †	0	0	0	0	0	0	0	0
Total new cases	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***
Institutional influenza outbreaks‡	0	0	0	0	0	0	0	0

SOURCE: MOHLTC [iPHIS, Health Unit Reports to PHD, Provincial Appendix D and Appendix E Database]

* Includes reports of sporadically occurring influenza through iPHIS, as well as cases in institutional outbreaks, with dates of onset in the surveillance period.

† Type of influenza, i.e. A vs B, was not specified in iPHIS (i.e. Influenza subtype dropdown menu left blank or reported as "Unspecified").

‡ Laboratory-confirmed outbreaks in institutions during the surveillance period.

Table 2: Confirmed* cases of influenza by health unit & health region, with an episode date† between August 27 – Sept. 9 (weeks 35 & 36), 2006.

Region	Health Unit	Laboratory-Confirmed Influenza			
		Influenza A	Influenza B	Unspecified‡	TOTAL
North West	Northwestern	0	0	0	0
	Thunder Bay District	0	0	0	0
	TOTAL NORTH WEST	**0**	**0**	**0**	**0**
North East	Algoma	0	0	0	0
	North Bay Parry Sound District	0	0	0	0
	Porcupine	0	0	0	0
	Sudbury & District	0	0	0	0
	Timiskaming	0	0	0	0
	TOTAL NORTH EAST	**0**	**0**	**0**	**0**
Eastern	Eastern Ontario	0	0	0	0
	Hastings & Prince Edward Counties	0	0	0	0
	Kingston, Frontenac, Lennox & Addington	0	0	0	0
	Leeds, Grenville & Lanark	0	0	0	0
	Ottawa	0	0	0	0
	Renfrew	0	0	0	0
	TOTAL EASTERN	**0**	**0**	**0**	**0**
Central East	Durham Region	0	0	0	0
	Haliburton, Kawartha, Pine Ridge District	0	0	0	0
	Peterborough County-City	0	0	0	0
	Simcoe Muskoka District	0	0	0	0
	York Region	0	0	0	0
	Peel Region	0	0	0	0
	TOTAL CENTRAL EAST	**0**	**0**	**0**	**0**
Toronto	Toronto	0	0	0	0
	TOTAL TORONTO	**0**	**0**	**0**	**0**
South West	Grey-Bruce	0	0	0	0
	Elgin-St. Thomas	0	0	0	0
	Huron County	0	0	0	0
	Chatham-Kent	0	0	0	0
	Lambton	0	0	0	0
	Middlesex-London	0	0	0	0
	Oxford	0	0	0	0
	Perth District	0	0	0	0
	Windsor-Essex County	0	0	0	0
	TOTAL SOUTHWEST	**0**	**0**	**0**	**0**
Central West	Brant	0	0	0	0
	Haldimand-Norfolk	0	0	0	0
	Hamilton	0	0	0	0
	Niagara Region	0	0	0	0
	Halton Region	0	0	0	0
	Waterloo Region	0	0	0	0
	Wellington-Dufferin-Guelph	0	0	0	0
	TOTAL CENTRAL WEST	**0**	**0**	**0**	**0**
	TOTAL ONTARIO	***0***	***0***	***0***	***0***

SOURCE: MOHLTC [iPHIS, Health Unit Reports to PHD]

* Confirmed cases of influenza can include laboratory-confirmed cases and epi-linked cases.

† Episode Date for a case corresponds to the earliest date on record for the case according to the iPHIS hierarchy (Symptom Date > Clinical Diagnosis Date > Specimen Collection Date > Lab Test Date > Reported Date)

‡ Type of influenza, i.e. A vs. B, was not specified in iPHIS [i.e. Influenza subtype dropdown menu left blank or reported as influenza (no type)]

Table 3: Cumulative* confirmed† cases of influenza by health unit & health region, September 1, 2005 to August 31, 2006.

Region	Health Unit	Laboratory-Confirmed Influenza			
		Influenza A	Influenza B	Unspecified‡	TOTAL
North West	Northwestern	7	11	0	18
	Thunder Bay District	2	2	0	4
	TOTAL NORTH WEST	***9***	***13***	***0***	***22***
North East	Algoma	12	7	7	26
	North Bay Parry Sound District	3	7	11	21
	Porcupine	10	28	3	41
	Sudbury & District	7	15	1	23
	Timiskaming	0	0	0	0
	TOTAL NORTH EAST	***32***	***57***	***22***	***111***
Eastern	Eastern Ontario	34	4	2	40
	Hastings & Prince Edward Counties	24	19	1	44
	Kingston, Frontenac, Lennox & Addington	28	25	0	53
	Leeds, Grenville & Lanark	3	0	24	27
	Ottawa	93	18	0	111
	Renfrew	5	6	0	11
	TOTAL EASTERN	***187***	***72***	***27***	***286***
Central East	Durham Region	11	1	2	14
	Haliburton, Kawartha, Pine Ridge District	37	69	0	106
	Peterborough County-City	2	6	5	13
	Simcoe Muskoka District	70	57	18	145
	York Region	39	58	18	115
	Peel Region	98	85	13	196
	TOTAL CENTRAL EAST	***257***	***276***	***56***	***589***
Toronto	Toronto	316	201	1	518
	TOTAL TORONTO	***316***	***201***	***1***	***518***
South West	Grey-Bruce	35	31	2	68
	Elgin-St. Thomas	2	0	0	2
	Huron County	10	32	1	43
	Chatham-Kent	7	1	4	12
	Lambton	7	19	0	26
	Middlesex-London	29	18	4	51
	Oxford	6	16	4	26
	Perth District	4	25	1	30
	Windsor-Essex County	18	11	0	29
	TOTAL SOUTHWEST	***118***	***153***	***16***	***287***
Central West	Brant	4	5	2	11
	Haldimand-Norfolk	14	11	0	25
	Hamilton	111	92	0	203
	Niagara Region	10	33	4	47
	Halton Region	58	21	17	96
	Waterloo Region	41	53	1	95
	Wellington-Dufferin-Guelph	10	43	9	62
	TOTAL CENTRAL WEST	***248***	***258***	***33***	***539***
	TOTAL ONTARIO	***1167***	***1030***	***155***	***2352***

SOURCE: MOHLTC [iPHIS, Health Unit Reports to PHD]

* Cumulative case counts include late reports and records that are otherwise reconciled. Therefore, cumulative counts may not equal new cases plus previous cumulative value.

† Confirmed cases of influenza can include laboratory-confirmed cases and epi-linked cases.

‡ Type of influenza, i.e. A vs. B, was not specified in iPHIS (i.e. Influenza subtype dropdown menu left blank or reported as unspecified)

Influenza Subtype(s):

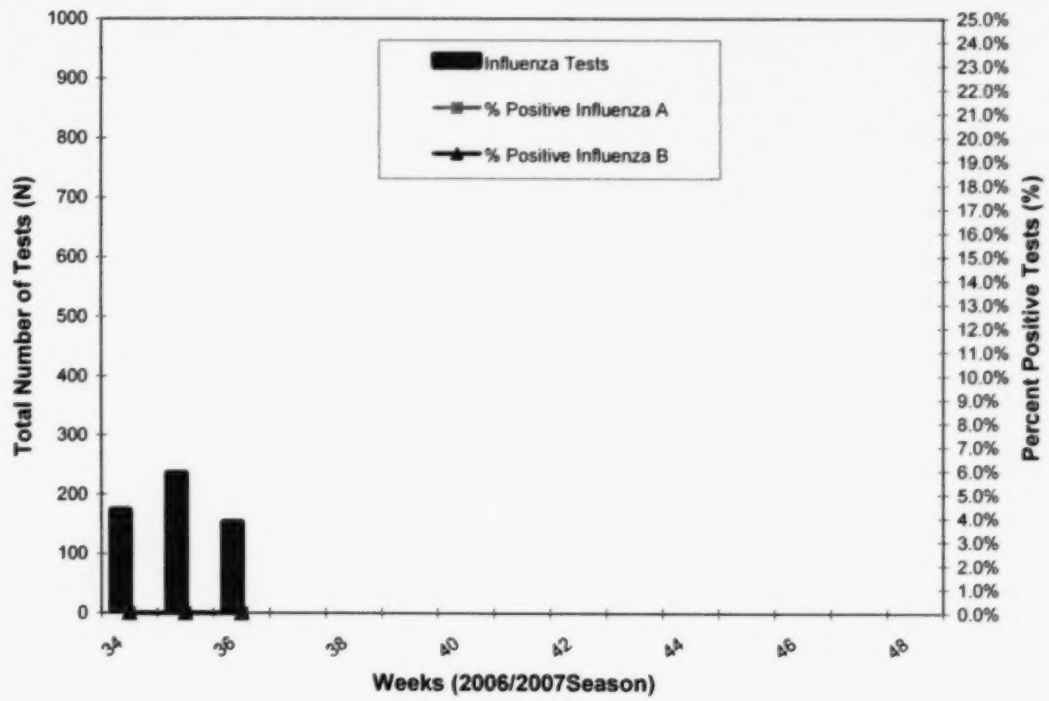
During weeks 35 and 36, 1380 isolates were received by the Public Health Agency of Canada. None of the isolates tested positive for influenza A or B.*

Since the start of the 2005-2006 influenza season, the National Microbiology Laboratory (NML) has antigenically characterized 1018 influenza viruses. Among these 54% were influenza type A and the remaining 46% were influenza type B.** During weeks 27 and 28, A/Wisconsin/67/2005-like viruses were antigenically characterized for the first time this season in Canada. It is the recommended A/H3N2 component for the 2006-2007 vaccine. Ninety nine percent of the influenza B viruses characterized have been B/Malaysia/2506/2004-like (B/Victoria/02/1987 lineage), which is the recommended influenza B component for the current season's vaccine.

Note: Based on the World Health Organization recommendations, Canada's National Advisory Committee on Immunization (NACI) recommended the **2006-2007** influenza vaccine contain an **A/New Caledonia-like**, an **A/Wisconsin-like** and a **B/Malaysia-like** virus strain.

* These data have been obtained from the Respiratory Virus Detection tables of Public Health Agency of Canada for weeks 35 & 36, 2006.
** These data have been obtained from the FluWatch report of the Public Health Agency of Canada for weeks 33 & 34, 2006

Figure 1: Total number of influenza tests performed and percent of positive tests in Ontario reported to the Centre for Infectious Disease Prevention and Control (CIDPC), by report week*.



Source: Public Health Agency of Canada
* Total numbers reported include late reports; therefore totals may not be equal to the sum of the weekly numbers.

Note: Cumulative numbers for season to date are available through FluWatch: http://www.phac-aspc.gc.ca/fluwatch/

Table 4: Institutional respiratory outbreaks in Ontario: New Outbreaks from August 27 through September 9 (Weeks 35 &36) 2006, and Total Outbreaks from September 1, 2005 to August 31, 2006

Institutional Respiratory Infection Outbreaks

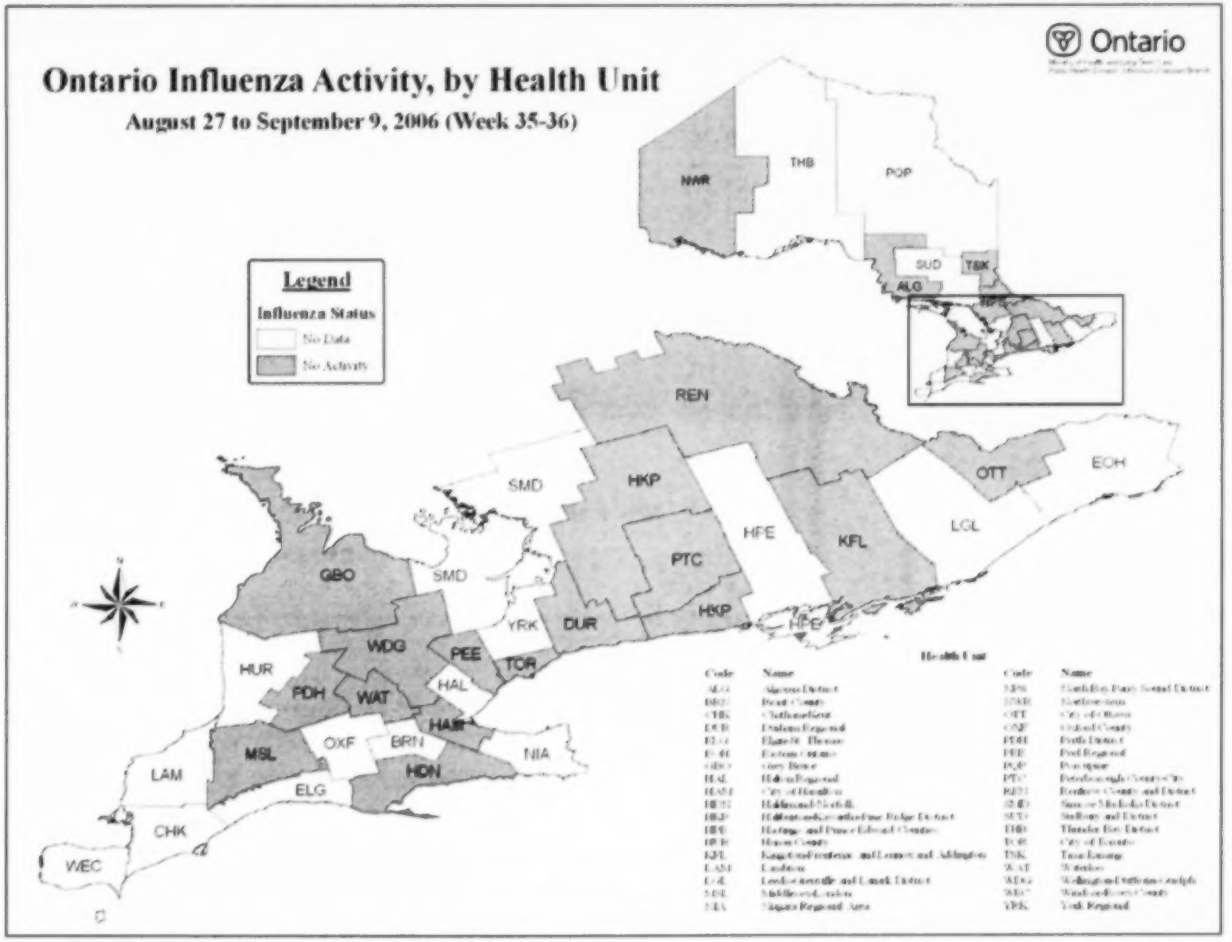
New Outbreaks* (Aug. 27 – Sept. 9, 2006)	**N**	**% (of outbreaks)**
Influenza A	0	0.0
Influenza B	0	0.0
Influenza A and B	0	0.0
Parainfluenza (All types)	0	0.0
Other organisms	0	0.0
No organism identified	8	100.0
TOTAL	***8***	***100***
Total Respiratory Infection Outbreaks of the Season (Sept. 1 2005 – Aug. 31 2006)**	**N**	**% (of outbreaks)**
Influenza A	126	15.9
Influenza B	21	2.7
Influenza A and B	5	0.6
Parainfluenza (All types)	46	5.8
Other organisms	103	13.0
No organism identified	490	62.0
TOTAL	***791***	***100***
Types of Institutions (All Outbreaks) **	**N**	**% (of outbreaks)**
Long-Term Care Homes	664	83.9
Hospitals	47	5.9
Retirement Homes	74	9.4
Other	6	0.8
TOTAL	***791***	***100***
Outbreak Related Complications (All Outbreaks) **	**N**	**% (of cases)**
Deaths		
Residents	298	3.0
Staff	1	0.0
Pneumonia (Chest x-ray confirmed)		
Residents	531	5.3
Staff	23	0.8
Hospitalizations		
Residents	563	5.6
Staff	12	0.4

SOURCE: MOHLTC [Provincial Appendix D and Appendix E Database]

- New outbreaks are those in which the date of onset of the first case occurred in the current surveillance period (August 27 – Sept.9, 2006)

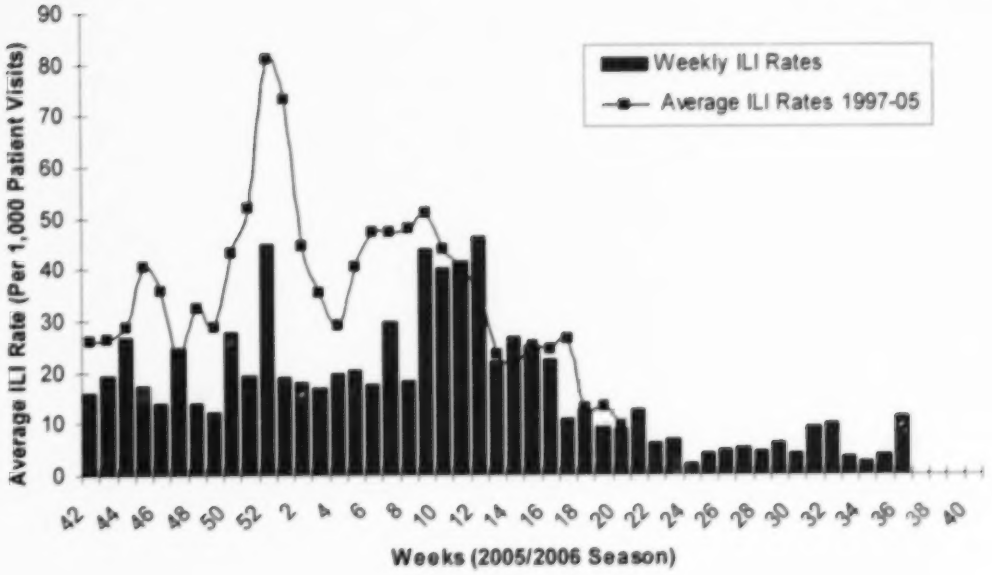
** Season to date includes all outbreaks in which the date of onset of the first case occurred between September 1, 2005 and August 31, 2006.

Figure 2: Influenza Activity* levels in Ontario by health unit & health region for weeks 35 & 36, between August 27 – Sept 9, 2006.



SOURCE: MOHLTC [Provincial Influenza Activity Report (Appendix C) Database]
* Influenza activity levels are assigned by local public health units and reported to the MOHLTC by the Tuesday following the end of the surveillance week at 4 pm. Activity levels are assigned based on laboratory confirmations, ILI reports from various sources, and laboratory-confirmed institutional outbreaks. Please refer to detailed definitions for the 2005-2006 season included in the Appendix]

Figure 3: Average influenza-like illness (ILI) consultation rate (per 1,000 patient visits) reported by sentinel physicians* in Ontario in 2005- 2006 season, by report week, Compared to Ontario average† (1996/97 to 2004/05 seasons).



Source: Public Health Agency of Canada

* Sentinel physician information is reported to Public Health Agency of Canada.

†No data available for mean rate in previous years for weeks 21 to 39 (1996-1997 through 2002-2003 seasons). During weeks 20-39, 2002-2003/2004-2005 seasons, ILI is reported once every two weeks, on even weeks only.

Table 6: Average influenza-like illness consultation rate (per 1,000 patient visits) reported by Sentinel Physicians* in Ontario, by age group and postal code for week 35 (August 27 – Sept. 2), 2006.

Postal Code	0 – 4	5 – 19	20 – 64	65 +	Unknown
K0C1A0	0	0	0	0	0
L1A3W4	0	0	0	0	0
L1B1H8	0	0	0	0	0
M4X1W4	0	0	0	0	0
M6G4A1	0	0	0	0	0
M4E1V8	0	0	0	0	0
M8Y1W3	0	0	0	0	0
M3H1T1	0	0	0	0	0
M9W4L6	0	0	0	0	0
M8V2Z5	0	0	0	0	0
L4Y2N8	0	0	0	0	0
L6W2A4	0	1	2	0	0
L9W1G2	0	0	0	0	0
L9H1V1	0	0	0	0	0
L9H2G2	0	0	0	0	0
L2E1Y3	0	0	0	0	0
N2M3B5	0	0	0	0	0
N5H1K9	0	0	0	0	0
N0R1G0	0	0	0	0	0
N0M1T0	0	0	0	0	0
N6C2R5	0	0	0	0	0
N0C1E0	0	0	0	0	0
P0P1S0	0	0	0	0	0
P3E5V5	0	0	0	0	0
P6B1Y5	0	0	0	0	0
P7E1H5	0	0	0	0	0
P0W1E0	0	0	0	0	0
P9N3W7	0	0	0	0	0
P9N3W7	0	0	0	0	0
ILI Sum	0	1	2	0	0
ILI Consultation Rate (per 1,000 patient visits)	0.0	11.8	4.6	0.0	0.0

Source: Public Health Agency of Canada
* Sentinel physician information is reported to the Public Health Agency of Canada
Note: The small numbers of sentinel physicians reporting at the local level make the ILI rates unstable. Please interpret these data correspondingly.

Table 7: Average Influenza-like illness consultation rate (per 1,000 patient visits) reported by Sentinel Physicians* in Ontario, by age group and postal code for week 36 (Sept. 3 - 9), 2006.

Postal Code	0 – 4	5 – 19	20 – 64	65 +	Unknown
K0C1A0	0	0	0	0	0
K2P1V3	0	0	0	0	0
K1J9M2	0	0	0	0	0
K0H2N0	0	0	0	3	0
K7H2W6	0	0	0	0	0
L1A3W4	0	0	0	0	0
K0M1A0	0	0	0	0	0
L1B1H8	0	0	0	0	0
L4L4Y7	0	0	0	0	0
L4J7Y3	0	0	0	0	0
M4X1W4	0	0	0	0	0
M6G4A1	0	0	0	0	0
M3H1T1	0	0	0	0	0
M9W6N5	0	0	0	0	0
M9W4L6	0	0	1	0	0
M8V2Z5	0	0	0	0	0
L4Y2N8	0	0	0	0	0
L6W2A4	0	0	3	0	0
L9H1V1	0	0	1	0	0
L9H2G2	0	0	0	0	0
L2E1Y3	0	0	0	0	0
N3C2E2	0	0	1	0	0
N2M3B5	0	0	0	0	0
N0M1T0	0	0	0	0	0
N6C2R5	0	0	0	0	0
N0C1E0	0	0	0	0	0
L4R4P4	0	0	0	0	0
P3E5V5	0	0	0	0	0
P4N1C6	0	0	0	0	0
P7E1H5	0	0	0	0	0
P0W1E0	0	0	0	0	0
P9N3W7	0	0	0	0	0
ILI Sum	0	0	6	3	0
ILI Consultation Rate (per 1,000 patient visits)	0.0	0.0	13.2	12.5	0.0

Source: Public Health Agency of Canada
* Sentinel physician information is reported to the Public Health Agency of Canada
Note: The small numbers of sentinel physicians reporting at the local level make the ILI rates unstable. Please interpret these data correspondingly.

FURTHER INFORMATION

1. Ontario Ministry of Health and Long-Term Care
   Previous issues of the *Ontario Influenza Bulletin* can be accessed at:
   www.health.gov.on.ca/english/providers/program/pubhealth/flu/flu_04/flubul_mn.html

2. Public Health Agency of Canada
   Issues of FluWatch can be accessed at:
   www.phac-aspc.gc.ca/fluwatch/

3. United States Centers for Disease Control and Prevention
   www.cdc.gov/flu/

INFORMATION ABOUT AVIAN INFLUENZA

For latest information on the status of avian influenza worldwide please use the following link:

Public Health Agency of Canada
http://www.phac-aspc.gc.ca/h5n1/index.html

APPENDIX

Definitions for influenza activity levels:

No Data: No activity report corresponding to the surveillance week was received at the Ministry of Health and Long-Term Care Call Centre by the Tuesday (at 4 p.m.) following the end of the surveillance period.
No Activity = No ILI and no laboratory-confirmed cases* or outbreaks occurred.
Sporadic: sporadically occurring ILI **AND** laboratory-confirmed influenza* with NO outbreaks detected within the influenza surveillance region†
Localized: sporadically occurring ILI **AND** laboratory-confirmed influenza* together with outbreaks of ILI in schools and worksites or laboratory confirmed influenza in residential institutions occurring in less than 50% of the influenza surveillance region(s)
Widespread: sporadically occurring ILI **AND** laboratory-confirmed influenza* together with outbreaks of ILI in schools and worksites or laboratory-confirmed influenza in residential institutions occurring in greater than or equal to 50% of the influenza surveillance region(s)

* Confirmation of influenza within the surveillance region at any time within the prior four weeks
† Sub-regions within the province or territory as defined by the provincial/territorial epidemiologist

Influenza-Like Illness (ILI) Definitions:

A) ILI in the general population:

Acute onset of respiratory illness with fever and cough and with one or more of the following - sore throat, arthralgia, myalgia, or prostration which could be due to influenza virus. In children under 5, gastrointestinal symptoms may also be present. In patients under 5 or 65 and older, fever may not be prominent.

B) ILI/Influenza outbreaks:

Schools and work sites: greater than 10% absenteeism on any day most likely due to ILI.

Residential institutions: two or more cases of ILI within a seven-day period, including at least one laboratory-confirmed case.